

ABSTRACT OF THE DISCLOSURE

Techniques and systems suitable for performing low-loss fusion splicing of optical waveguide sections are provided. According to some embodiments, multiple laser beams (from one or more laser) may be utilized to uniformly heat a splice region including portions of the optical waveguide sections to be spliced, which may have different cross-sectional dimensions. According to some embodiments, the relative distance of the optical waveguide sections and/or the power of the multiple laser beams may be varied during splicing operations.

24439_1